



# **INTERNAL AUDIT SUBSTANTIVE TESTING CELLULAR TELEPHONES**

February 3, 2003

Roanoke City Council Audit Committee  
Roanoke, Virginia

We have completed an audit of cellular phone procedures and expenditures. We performed this audit in accordance with generally accepted government auditing standards.

## **BACKGROUND**

The City of Roanoke paid approximately \$74,000 in fiscal 2002 for cellular telephone services provided by Verizon Wireless, Suncom, U.S. Cellular, and Intelos. We identified 21 agencies in the city that have cellular phone expenses charged to their agency code. These agencies include Fire/EMS, Police, Sheriff, Juvenile Justice, Social Services, Parks and Recreation, and Public Works. Within an agency there can be multiple departments that have their own cellular contracts. The city regulates cellular phone use through administrative procedures 3.7 "Cellular Telephone – Personal Use" and 7.10 "Cellular Telephone Ordering and Use", issued by the Department of Finance and Department of Technology, respectively.

These administrative procedures require department managers to identify funding in their existing budgets for any proposed cellular service. They must also complete a justification memo supporting the need for the service based on improved operational efficiencies and/or cost savings. The appropriate Assistant City Manager must review and approve the justification memo before the department can obtain a service contract or additional cellular phones.

Departments are responsible for shopping for a suitable cellular service plan. The Purchasing Manager is required to sign all cellular service contracts but has no responsibility for procuring or monitoring the service. Administrative Procedure 7.10 requires that the service contract be for a period no longer than a year due to the continuing evolution of the technology and highly competitive service plans in the cellular service industry. Contracts must also specify that the vendor must provide detailed billing in order for departments to have the capability to monitor cellular phone activity as needed. The administrative procedure limits personal use of cellular phones to essential or emergency local calls. Emergency personal calls should be very limited, recorded daily, and the employee must reimburse any associated costs related to them.

Cellular phones have been justified mainly on the basis that they enhance customer service. Some examples of how cellular phones have been used to enhance customer service are:

- EMS employees can communicate confidential patient information in route to the hospital that would otherwise not be communicated until arriving at the hospital if the only alternative was to broadcast the information over the City's radio system.
- Social Service employees transporting children can call for assistance if their auto breaks down rather than depending on passing motorists to help.
- Police officers or other employees who generally work out in the field can promptly return citizens' calls that would normally have to be returned at the end of their shifts or later.

**PURPOSE:**

The purpose of this audit was to evaluate compliance with certain provisions of the City's administrative procedures addressing cellular phones and to evaluate the effectiveness of current policies in controlling cellular phone expenditures.

**SCOPE**

The scope of this audit included cellular phone expenditures from July 01, 2001, through June 30, 2002. We included appointed and constitutional officers' departments in this review.

**METHODOLOGY**

We gained an understanding of the cellular services provided to the City of Roanoke through a review of existing documentation, policies and procedures, and interviews with departmental personnel. We retrieved all expenditure data for object 2021 (Cellular Telephones) from the AMS accounting system maintained by the Department of Finance. We selected departments for detailed testing based primarily on the level of expenditures in their 2021 account. This encompassed 11 departments and 134 individual cellular phones. The departments reviewed were: Fire/ EMS, Housing & Neighborhood Services, Planning, Police, Public Works, Parks & Recreation, Social Services, Utilities, Juvenile Justice, the Commonwealth's Attorney, and the Sheriff's department.

In each department selected, we attempted to verify that justification memos were adequately completed and signed by the appropriate Assistant City Manager. We documented each department's process for reviewing cellular phone bills in accordance with Administrative Procedure 3.7. Then, we selected a sample of monthly bills for review and testing. We scanned bills to identify any long distance calls, calls outside the City's exchange (853), calls made outside normal business hours, and frequently dialed numbers. We attempted to evaluate the propriety of selected phone calls based on interviews with employees and by researching numbers through the Internet using reverse lookup. We also reviewed the minutes used for each phone over four months

of billings to evaluate the cost effectiveness of current plans, and we reviewed contracts on file in Purchasing to ensure contracts were for no more than a one-year term.

## **RESULTS**

Using the criteria above, we reviewed 335 individual calls and found only six that we assessed as probable personal calls that were not reimbursed. Overall, personal use of cellular phones appeared to be very limited. Cellular service contracts were limited to one year as required by policy. Over the course of our review, we recognized the difficulty departments experience in managing cellular phone service to the best advantage of the organization. The following finding is a conglomeration of the issues that arose while assessing compliance with the City's procedures.

### **Finding 01 – Policy and Compliance**

Of the eleven departments tested, only four had written justifications on file documenting the need for cellular phones. None of the eleven departments had justification memos for all of their cellular phones. The departments believed that their original service plans were obtained before the administrative procedure requiring justification was in place. The requirement to document detailed justification for phone service is an important control that helps ensure departments make sound decisions about the costs and benefits of acquiring cellular service.

The interpretation of the City's personal use policy varied in the departments audited. In some cases, departments rationalized that personal use had no associated "costs" to the city if the minutes included in the service plan were not exceeded. In other cases, departments had a stricter interpretation that any personal use should be reimbursed at a "per minute" charge regardless of whether or not the plan minutes were exceeded. The "per minute" charge varied by department since city policy does not specifically address the rate at which personal use should be reimbursed.

The requirements for employees to record and reimburse their personal use varied, as did the procedures followed by departments in trying to monitor billings and identify unreported personal use. One department required employees to log all calls (date, phone number, person) and compared the logs to the monthly detailed bills. Other departments required no logs and instead had various criteria for scanning detailed bills and researching calls. Many departments found it difficult to manage cellular use in a cost effective and efficient way.

We also attempted to evaluate the cellular plans purchased by departments. We evaluated 134 phones over four months on the basis of minutes used versus minutes purchased in the plan. There were phones that were part of a "shared minutes" plan. In those cases, we calculated the average utilization by summing the minutes used by all phones in the plan and dividing that number by the number of pooled minutes purchased. Usage that was outside the range of 25% to 125% of available minutes was evaluated by us to be less than optimum. We found that 11.6% of the City's monthly service was under-utilized (ie., used less than 25% of purchased minutes) and 3.9% of the City's monthly service was over-utilized (ie., exceeded purchased minutes by 25% resulting in higher per minute charges).

**Recommendation 01 – Policy and Compliance**

We have discussed the results of the audit with the Director of Technology, the City Manager's office, and the Department of Finance. We have agreed that the City's administrative procedures should be revised to be more complimentary and consistent. There are three administrative procedures and one personnel operating policy (POP) that should be included in a review of policy:

- "Cellular Telephone – Personal Use" (AP – 3.7): Requires itemized bills, discourages personal use, and requires employees to reimburse the city via a collection report to the City Treasurer before processing monthly billings. This procedure is issued by the Department of Finance.
- "Electronic Media Usage" (AP – 5.10): Issued by the Department of Technology, it is actually an acceptable use agreement that employees must sign. It addresses "phone" use but does not address cellular phone use.
- "Cellular Telephone Ordering and Use" (AP - 7.10): Issued by the City Manager and the Department of Technology, it requires departments to prepare written justification for service and to have it approved by an Assistant City Manager before acquiring cellular services. It also allows only "essential" personal calls for events such as extended work hours or unexpected travel and requires the employee to record such calls and reimburse the city for their costs.
- "Use of City Equipment for Private Purposes: Prohibition" (POP #27), which prohibits an excessive number and duration of personal telephone calls on city phones and prohibits any long distance calls for personal purposes.

We suggest that guidance be provided through policy regarding how to monitor cellular activity, as well as when and at what rate reimbursement is to be paid for personal use. A minimum value should be set to avoid processing collection reports for amounts that don't cover the cost of processing the paperwork. We also recommend that the Department of Technology evaluate its existing "Acceptable Use Agreement" for electronic media and incorporate cellular phones into this agreement. This agreement should cover limitations imposed on cellular phone use and the steps that may be taken if the agreement is violated.

As we have noted, a number of cellular phones have not been justified under the current policy. We recommend that departments review their current cellular phone inventory, determine the necessity for each phone, and document their justifications as required by policy.

We have also discussed with the Director of Technology, the benefits and associated costs of consolidating cellular service plans into a corporate plan managed centrally by the Department of Technology. Cellular technology continues to evolve and there remain significant differences in coverage and service that make it difficult to select one plan that meets the needs of all city departments. We have agreed that the diversity of department needs coupled with the currently low level of expenditures in cellular service

support leaving the administration of cellular plans in the individual departments at the present time. The Department of Technology will continue to monitor the cellular service market and city utilization of cellular service. It is likely that in the next three to five years, cellular service and wireless applications will merge to a degree requiring more centralized administration by the Department of Technology.

### **Management Response 01 – Policy and Compliance**

The Department of Technology has reviewed the audit report on "Cellular Telephone Usage and Procedures" with the Municipal Auditor and concurs with the recommendations that we update Administrative Procedure 5.10 for "Electronic Media Usage". The update should incorporate cellular telephones guidelines for business and personal usage. The Department of Technology will also work with the City Manager, Director of Finance and the Director of Management and Budget to update other Administrative and Personnel Operating Procedures relating to limitations and liabilities of employees cellular telephone usage. The target date for completing our update of the specified policies and procedures is March 1, 2003.

As indicated in the audit report, the evolution of cellular (voice) and wireless (data) technologies is converging and will be commonplace in the market over the next 3 years. The Department of Technology feels that a single device offering both services is on the horizon. Areas that must be reviewed and researched are cost efficiency, security, performance and compatibility to the City's infrastructure. To address these requirements, the Department of Technology has established a functioning "Wireless Team" to review the market and product offerings to make sure that the City stays current in the use of this technology when it becomes available.

### **CONCLUSION**

Based on the results of our audit work, we believe that current policies have been effective in controlling cellular service expenditures. While we did note compliance exceptions related to certain provisions of city policy, we did not identify any material effect on cellular expenditures resulting from those exceptions.

We would like to thank the staff and management in those departments we reviewed for their cooperation and assistance in completing this audit.

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